

ABSTRACT OF THE DISCLOSURE

[0025] A first device comprising a first current mirror is used to amplify the output of a first photodetector. A second device comprising a current mirror arrangement is employed to amplify the output of a second photodetector. The outputs of the two devices are then compared to provide a signal useful for many applications, including that for determining the position of a rotating member or of a member in relative motion to another member. Preferably, no feedback action is used for the amplification of the output of at least one of the photodetectors.